

Abstract of the Disclosure

A stream computer comprises a plurality of interconnected functional units. The functional units are responsive to a data stream containing data and tokens. The data is to be operated on by one or more of the plurality of interconnected functional units.

5 Digital logic cooperatively associated with one of the functional units adds one or more tokens to the data stream presented to one of the functional units. The tokens are representative of the type of data being generated or received by the functional units. The digital logic also reports the occurrence of said one or more tokens within said data stream without interrupting the data stream.

10 The digital logic reports one or more tokens arriving at one of the functional units as part of the data stream to a graphical programming environment. The graphical programming environment is compatible with human perception. The programming environment compares tokens arriving from the digital logic with stored values within the graphical environment for the tokens so as to identify any errors. An
15 error message is generated by the graphical programming environment whenever the comparison between the tokens and the stored values within the programming environment indicates that the tokens and the stored values do not match. These tokens are reported by the digital logic to a graphical programming environment compatible with human perception.